# Destination Healthy Kids: Roadmap for Schools, Communities, and Health Organizations

2007 Community Involvement Conference

Jacksonville, FL June 19-22, 2007

Pamela Collins, MSA

Vice-President of Programs



### Who We Are?

- Oldest voluntary health organization in US
- Founded in 1904 to fight tuberculosis
- Grassroots organization: national headquarters (NY & DC), constituents, and affiliates.
- Over 1,200 staff nationwide and over 300,000 volunteers



### Mission

The mission of the American Lung Association is to prevent lung disease and to promote lung health.



# How Does Asthma Affect Children in Schools?

- Students and staff with asthma
- Potential asthma emergencies
- Student absenteeism
- Teacher absenteeism/reduced productivity



### School-Based Asthma Management

- Key Components
  - Access to healthcare
  - Students and school personnel education
  - Healthy environment
  - Physical education/physical activity



# Components of School-Based Asthma Education

- Students
  - Focus on specific asthma management skills
  - Communicating with parents and school personnel
- Parents
  - How to manage child's asthma
  - Communication among parents, healthcare provider, and school personnel



# Components of School-Based Asthma Education

- School Personnel
  - Use an Asthma Action Plan
  - Respond to emergencies
  - Recognize signs of an asthma episode
  - Help students manage their asthma
  - Provide asthma-appropriate physical activity



# What Will Asthma Education in the School Accomplish?

- Decrease asthma crisis in the schools
- Decrease student absenteeism
- Address strategies to maximize school's health
- Present opportunities to link with community partners



# How is Asthma Education in the School Implemented?

- Specific programs for those students with asthma
- Parent education opportunities
- School Personnel asthma in-services
- Work with community asthma coalitions



### Asthma Education for Students

- Definition of asthma (signs and symptoms)
- Identifying and avoiding triggers
- Using peak flow meters
- Knowing their medication
- Administering medications



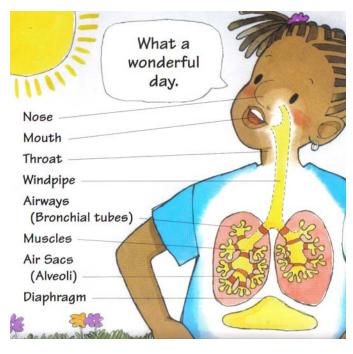
# Open Airways for Schools

Open Airways for Schools Program (OAS) is an asthma education program that empowers children (ages 8-11) to manage their asthma





# Curriculum Components



- Six 40-minute group lessons
- The OAS kit contains
  - Lesson Book
  - Posters
  - Students Handouts
  - Parent Handouts
  - Pre/Post Questionnaire
  - 3 Month Follow-up Survey



## Team Approach

Children with asthma

- + their families
- + teachers
- + school nurses

\_\_\_\_\_

Success!





# Development

- OAS is based upon a program created and evaluated by Columbia University's College of Physicians and Surgeons
- Supported by National Heart, Lung and Blood Institute
- Recommended by the National Association of School Nurses
- Copyrighted by American Lung Association





# **Educational Theory**



- Jean Piaget Theory of Cognitive Development
- Hands-on
- Cause and effect

## Role Play

#### It's the beginning of the second half of the basketball game during P.E. class.

Coach Baker: I am taking you out now, George.

George: Why, Coach Baker?

Coach Baker: I don't want you to get sick with asthma.

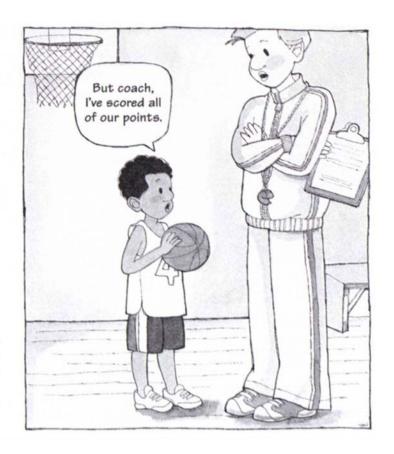
I don't know how to take care of it.

George: But, Coach Baker!

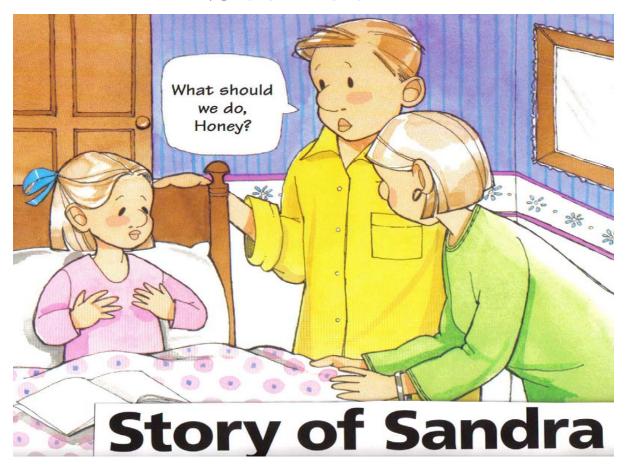
Coach Baker: On the bench, George!

What can George say to his coach so that he can play basketball? What can George do?





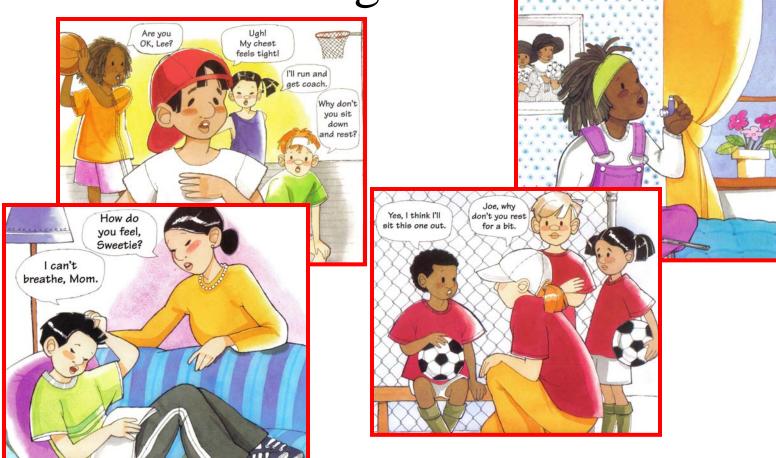
### **Stories**





Four Steps to Asthma

Management





# Is it Working?

- 477 children enrolled in Georgia public school systems 3<sup>rd</sup>, 4<sup>th</sup>, or 5<sup>th</sup> grades increased their asthma management skills by 13.20% showed that they:
  - Had fewer asthma episodes
  - Improved academic performance
  - Gained confidence in their ability to manage their asthma
  - Exerted greater influence on their parents' asthma management decisions



### Asthma Education for Parents

- Definition of asthma
- Asthma Action Plans
- School response/responsibilities
- Possibly identifying undiagnosed cases of asthma in students

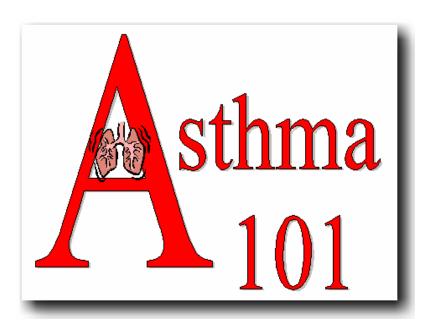


# Asthma Education for School Personnel

- Definition of asthma
- Signs/symptoms of an asthma episode
- Asthma medications
- Responding to an asthma episode/using an Asthma Action plan
- Emergency protocol for students without an Asthma Action Plan



### Asthma 101



Basic asthma information to help parents, caregivers, and school personnel to effectively manage asthma in schools to promote a supportive learning environment.



# Curriculum Components

- One hour educational presentation
- Participants receive
  - 32 page Asthma 101 booklet
  - Asthma Management Plan Poster
  - Common Asthma Triggers Psoter
  - Pre/Post Tests

Management of an Asthma Episode				
STOP	1	Instruct the person to stop all physical activity. Remove the person from known triggers, if possible.		
	2	Assist the person into an upright position. Encourage the person to remain calm.		
	3	Ensure that the medication prescribed on the person's action plan is administered. This should be a rescue medication.		
	4	Allow 15-20 minutes for the medication to take effect.		

Implement the emergency plan if no relief is noted after the time specified on the person's action plan or if the following occur:

- Peak flow falls below 50% (or value specified on the student's action plan)
- Retractions (neck area or space between ribs sink in with each breath)
- Posturing (hunched over to breathe)
- Person has difficulty walking, difficulty talking, or is unable to speak
- Lips or fingernails turn blue or gray





- Administer emergency meds prescribed on the person's action plan.
- 2. Notify emergency services or call 911
- 3. Notify parent, guardian, or emergency contact

For more information on asthma, contact 1 800 LUNG USA # AMERICAN ASSOCIATION.



# The Lungs of Asthma

Normal Lung Tissue

**Asthma** 





Color plates used with permission from **DesJardins and** Burton, **Clinical** *Manifestations* **& Assessment of Respiratory Disease,** 3E, Mosby, 1995



### Classification of Asthma

Category	Days with Symptoms	Nights with Symptoms
Step 1  Mild intermittent  Step 2  Mild persistent	≤ 2 week ≥ 2 week	≤ 2 month  3-4/month
Step 3  Moderate persistent	Daily	≥ 5/month
Step 4 Severe persistent	Continual	Frequent



### Successful Asthma Management

# Requires teamwork between the:

- student
- parents/guardians
- primary health care provider
- school personnel





### Zones and Actions



#### **Green Zone:**

80-100% of personal best No symptoms present

#### GO

Proceed with normal activities and continue daily medications.



#### **Yellow Zone:**

50-79% of personal best Coughing, wheezing, and shortness of breath may be present

#### **CAUTION**

Step up medications as prescribed and reduce activities as indicated.



#### **Red Zone:**

< 50% of personal best Posturing, retracting, difficulty speaking, blue/gray nail beds

#### STOP

Implement emergency care plan and restrict activities.



### Asthma Action Plan

	Green Zone: Go	Use preventive medicine.	
	Peak flow numberto *Breathing is good	Medicine How much to take When to take it	
<b>V</b>	*No cough or wheeze		
	*Can work and play	20 minutes before sports, use this medicine:	
	Yellow Zone: Caution Peak flow number	Take rescue medicine to keep an asthma episode from falling into the red zone.	
	*Cough *Wheeze *Tight Chest *Wake up at night	Medicine How much to take When to take it	
	Red Zone: Danger Peak flow number	Get help from a doctor now! Go to Emergency Dept. or call 911. Take these medicines until you talk with the doctor.	
	*Medicine is not helping *Breathing is hard & fast	Medicine How much to take When to take it.	
	*Nose opens wide *Can't walk *Ribs show *Can't speak entire sentence		



# Is it Working?

- 552 participants representing Georgia public school systems increased their asthma knowledge by 16.12% and were able to:
  - Identify common asthma symptoms
  - Identify potential asthma triggers
  - Identify asthma medications
  - Differentiate between "rescue" and "controller" medications used in asthma management
  - Understand asthma and school issues



## Pamela Collins, MSA

Vice President of Programs

pcollins@alase.org

770-434-5864, 521



## When You Can't Breathe, Nothing Else Matters ®

